WHAT IS CLAIMED IS:

1. A liquid discharging method for a liquid discharge head which includes a discharge port constituting the portion for discharging liquid, an energy generating element generating the energy for discharging liquid, and liquid flow paths communicating with said discharge port and equipped with said energy generating element, and which discharges liquid from said discharge port by the energy of said energy generating element, said liquid discharging method comprising the steps of:

projecting a liquid column from said discharge port;

separating a main droplet from the tip of said liquid column;

discharging said liquid column after said main droplet has been separated, and separating said liquid column into a plurality of satellite droplets; and

coalescing said plurality of satellite droplets.

2. A liquid discharging method in accordance with claim 1, wherein said energy generating element is an electrothermal transducer.

3. A liquid discharging method in accordance with claim 2, wherein said electrothermal transducer is used for

generating film boiling phenomena, and wherein said liquid discharge head further comprises a movable member which is displaced by the growth of a bubble due to said film boiling, and a controlling portion for controlling the displacement of said movable member so as to be within a desired range.

4. A liquid discharging method in accordance with claim 3, further comprising the step of separating the main droplet from the liquid column by pulling the liquid which projects through the discharge port into the discharging head when said bubble disappears.

5. A liquid discharging method in accordance with claim 4, further comprising the step of accelerating the liquid column by supplying the liquid to the vicinity of the discharge port by said movable member when said bubble disappears.

6. A liquid discharging method in accordance with claim 5, further comprising the step of separating the portion of the accelerated component of the liquid column by the suppression of the liquid supply by said movable member and the disappearance of the bubble.

7. A liquid discharging method in accordance with

claim 6, further comprising the step of recovering minute droplets by the suppression of the liquid supply by said movable member.

8. A liquid discharging method in accordance with claim 1, wherein the weight of the droplet formed by coalescing a plurality of satellite droplets after capturing, is not less than 1 ng.

9. A liquid discharging method in accordance with claim 1, wherein the discharge speed of said main droplet is 13 to 20 m/s while that of the coalesced satellite droplet is 6.5 to 10 m/s, and wherein the weight of said coalesced satellite droplet is not less than 1 ng.

10. A liquid discharging method in accordance with claim 1, wherein the relationship: V1 > V3 > V2 is satisfied, when the flight speed of said main droplet is V1, that of a front satellite droplet is V2, and that of a rear satellite droplet is V3.

11. A liquid discharging method in accordance with claim 1, wherein said energy generating element is an electromechanical transducer.

12. A liquid discharging method in accordance with claim 1, wherein the flight speed of said main droplet is larger than that of the droplet formed by coalescing a plurality of satellite droplets.

13. An image forming method for a liquid discharge head which includes a discharge port constituting the portion for discharging liquid, an energy generating element generating the energy for discharging liquid, and liquid flow paths communicating with said discharge port and equipped with said energy generating element, which forms a plurality of droplets by discharging said liquid from said discharge port by the energy of said energy generating element, and which forms an image by forming a plurality of dots by shooting said plurality of droplets onto a recording medium,

wherein said plurality of dots is formed of a main droplet which flies at the start; and a droplet formed by coalescing, after capturing, a plurality of satellite droplets which is discharged as a result of the discharge action of said main droplet, before said satellite droplets have been shot onto said recording medium.

14. An image forming method in accordance with claim 13, wherein said liquid is formed of a pair of reactive inks.

15. An image forming method in accordance with claim 14, wherein said reactive inks are constituted of a black ink and a color ink.

16. An image forming method for a liquid discharge head which includes a discharge port constituting the portion for discharging liquid, an energy generating element generating the energy for discharging liquid, and liquid flow paths communicating with said discharge port and equipped with said energy generating element, which forms a plurality of droplets by discharging said liquid from said discharge port by the energy of said energy generating element, and which forms an image by forming a plurality of dots by shooting said plurality of droplets onto a recording medium,

wherein an image is formed by using a pair of reactive inks constituted of a black ink and a color ink as said droplets, and by superimposing a plurality of dots of said color ink on each dot of the black ink, each of the dots of said color ink being smaller than the dot of said black ink.

17. An image forming method in accordance with claim 16, wherein said color inks comprise yellow, cyan, and magenta inks, and wherein each of said color inks is

constituted of a plurality of dots.

18. A liquid discharge apparatus, comprising:

a liquid discharge head which includes a discharge port constituting the portion for discharging liquid, an energy generating element generating the energy for discharging liquid, and liquid flow paths communicating with said discharge port and equipped with said energy generating element, which forms a plurality of droplets by discharging said liquid from said discharge port by the energy of said energy generating element, and which performs recording by shooting said plurality of droplets onto a recording medium; and

a carriage for conveying said liquid discharge head relative to the recording medium,

wherein said liquid discharge head forms said plurality of droplets using a main droplet which flies at the start; and a droplet formed by coalescing a plurality of satellite droplets discharged as a result of the discharge action of said main droplet, before said satellite droplets have been shot onto said recording medium; and

wherein said liquid discharge head shoots said plurality of droplets onto the recording medium with a space interposed therebetween.

19. A liquid discharge head which includes a discharge port constituting the portion for discharging liquid, an energy generating element generating the energy for discharging liquid, and liquid flow paths communicating with said discharge port and equipped with said energy generating element, which forms a plurality of droplets by discharging said liquid from said discharge port by the energy of said energy generating element, and which performs recording by shooting said plurality of droplets onto a recording medium,

wherein said plurality of dots is formed of a main droplet which flies at the start; and a droplet formed by coalescing, after capturing, a plurality of satellite droplets which is discharged as a result of the discharge action of said main droplet, before said satellite droplets have been shot onto said recording medium.

20. A liquid discharge head in accordance with claim 19, wherein said energy generating element is an electrothermal transducer.

21. A liquid discharge head in accordance with claim 20, wherein said electrothermal transducer is used for generating film boiling phenomena, and wherein said liquid discharge head further comprises a movable member which is displaced by the growth of a bubble due to said film boiling,

and a controlling portion for controlling the displacement of said movable member so as to be within a desired range.

22. A liquid discharge head in accordance with claim 19, wherein the weight of the droplet formed by coalescing a plurality of satellite droplets after capturing, is not less than 1 ng.

23. A liquid discharge head in accordance with claim 19, wherein the discharge speed of said main droplet is 13 to 20 m/s while that of the coalesced satellite droplet is 6.5 to 10 m/s, and wherein the weight of the coalesced satellite droplet is not less than 1 ng.

24. A liquid discharging method in accordance with claim 19, wherein the relationship: V1 > V3 > V2 is satisfied, when the flight speed of said main droplet is V1, that of a front satellite droplet is V2, and that of a rear satellite droplet is V3.